

R E M A R K S

Status of the claims:

With the above amendments, claim 1 has been amended and claim 8 has been added. Claims 1-8 are pending and are ready for further action on the merits. No new matter has been added. The amendment to claim 1 has support in the written description on lines 8-12 and lines 15-18 on page 2. Reconsideration is respectfully requested in light of the following remarks.

Rejections under 35 USC §103

Claims 1-7 have been rejected under 35 USC §103(a) as being unpatentable over Hefner '178 (US Patent No. 4,524,178) in view of JP '160 (JP No. 63-305160).

Claims 1-7 have been rejected under 35 USC §103(a) as being unpatentable over JP '160 in view of Harada '953 (US Patent No. 5,356,953) or JP '579 (JP No. 04-021579).

These rejections are traversed for the following reasons.

Present Invention

The present invention discloses a molding composition comprising an aggregate (Component A), a linear unsaturated polyester (Component B), and/or linear unsaturated polyester polyamide (Component C), and a radical generator (Component D),

wherein each of (Component B) and (Component C) comprise a specific alkylene oxide adduct of bisphenol A in an amount of from 3 to 50 mol% based on the total amount of constituent monomers of each of (Component B) and (Component C), and a molded article obtained by molding the composition.

Disclosure of Hefner '178

Hefner '178 discloses a polyester and polyester-amide alkyds containing no polycycloalkenyl end groups, in admixture with non-resinous vinyl monomers, which are flexibilized by inclusion in the mixtures of about 1 to 20 parts by weight of a polyglycol moiety-comprising, vinyl reactive, urethane oligomer per hundred parts of the alkyd.

Hefner '178 does not teach a composition that is substantially free of ethylenically unsaturated-group containing monomers.

Disclosure of JP '160

JP '160 discloses a composition comprising an unsaturated polyester resin containing at least 1/6 mol hydrogenated bisphenol A glycol and a metal salt of stearic acid. The composition contains at least 1/6 mol hydrogenated bisphenol unsaturated polyester per mol resin to retain heat resistance. The composition contains 45-35% wt. % crosslinking agent and 55-65% wt. % polyester.

JP '160 does not teach a composition that is substantially free of ethylenically unsaturated group-containing monomers.

Disclosure of Harada '953

Harada '953 discloses a resin composition for artificial marble comprising: (I) an unsaturated polyester obtained by using a divalent alcohol containing hydrogenated bisphenol A as an essential component and an α - β -ethylenic unsaturated dibasic acid; (II) a copolymerizable monomer; (III) an unsaturated alcohol which can be copolymerized with the unsaturated polyester (I) and the copolymerizable monomer (II); and (IV) a low molecular weight styrene-maleic anhydride copolymer. The low molecular weight styrene-maleic anhydride copolymer has a molar ratio of styrene to maleic anhydride of 3:1 to 7:1 with a number average molecular weight of less than 5,000. The unsaturated alcohol (III) is used in an amount that the weight ratio of the unsaturated alcohol (III) to the copolymerizable monomer (II) is 1:99 to 50:50. The weight ratio of the unsaturated polyester (I) to (the copolymerizable monomer (II)+the unsaturated alcohol (III)) is 30:70 to 70:30. The weight ratio of the styrene-maleic anhydride copolymer (IV) to (the unsaturated polyester (I)+the copolymerizable monomer (II)+the unsaturated alcohol (III)) is 10:90 to 40:60. Harada '953 also discloses a bulk molding compound or sheet molding compound using

the same, and a process for preparing artificial marble using the same.

Harada '953 does not teach a composition that is substantially free of ethylenically unsaturated group-containing monomers.

Disclosure of JP '579

JP '579 discloses a curable concrete protecting material comprising (A) 60-80 parts by weight composed of a composition consisting of an unsaturated polyester prepared by reacting an unsaturated dibasic acid and/or an acid anhydride thereof with a hydrogenated bisphenol A propylene oxide derivative and an ethylenic unsaturated monomer containing a polymerizable double bond and (B) 20-40 parts by weight glass flakes so as to give 100 parts by weight total amount of the two components. The temperature at which the concrete protecting material is coated or executed is usually 0-40°C and a pot life is preferably controlled by regulating the amount of a reaction promoter or a polymerization inhibitor added depending upon the temperature difference between summer and winter.

JP '579 does not teach a composition that is substantially free of ethylenically unsaturated group-containing monomers.

Removal of Hefner '178 in view of JP '160 and JP '160 in view of
Harada '953 or JP '579

None of the cited references disclose a composition that is substantially free of ethylenically unsaturated group-containing monomers. All four cited references are directed to compositions that contain a resin, monomers, and an addition agent. In contrast, the presently claimed invention is directed to a composition that is substantially free of ethylenically unsaturated group-containing monomers. In particular, the vinyl monomers of Hefner '178, the "crosslinking agent" of JP '160, the "copolymerizable monomer" of Harada '953 and the "ethylenic unsaturated monomer containing a polymerizable double bond" of JP '579 all correspond to ethylenically unsaturated group-containing monomers.

Accordingly, Applicants assert that the Examiner has failed to make out a *prima facie* case of obviousness with regard to the 35 USC §103(a) rejections over Hefner '178 in view of JP '160 and JP '160 in view of Harada '953 or JP '579. Three criteria must be met to make out a *prima facie* case of obviousness.

- 1) There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

- 2) There must be a reasonable expectation of success.
- 3) The prior art reference (or references when combined) must teach or suggest all the claim limitations.

See MPEP §2142 and *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991). In particular, the Examiner has failed to meet the third element to make a *prima facie* obviousness rejection. None of the references disclose or suggest a composition that is substantially free of ethylenically unsaturated group-containing monomers. All of the cited references are likely to have problems with smell and safety as they do not disclose or suggest any composition that is substantially free of ethylenically unsaturated group-containing monomers.

Moreover, Applicants assert that the first element of a *prima facie* case is also not met. JP '160, Harada '953 and JP '579 have compositions that are directed to hydrogenated bisphenol A, whereas the instant invention discloses non-hydrogenated bisphenol A. JP '160 states:

An unsaturated polyester resin used in the present invention is limited to a hydrogenated bisphenol (type) unsaturated polyester resin containing 1/6 or more of a hydrogenated bisphenol A glycol in molar ratio. That is, a resin other than this resin is not used because of a deterioration of a high frequency characteristic and heat resistance. (page 439, right hand column last four lines to page 440 line 2).

From this disclosure it should be obvious that the invention of JP '160 was intended to prevent the deterioration of a high frequency characteristic and at the same time provide heat

resistance. JP '160 did not contemplate, and in fact, JP '160 teaches away from using non-hydrogenated bisphenol A as is disclosed in the present invention. (See "a resin other than this resin is not used because of a deterioration of a high frequency characteristic and heat resistance.") Accordingly, the combination of JP '160 with any reference that teaches non-hydrogenated bisphenol A is inapposite. Applicants thus assert the motivation to combine references and necessary to make a *prima facie* case is lacking. Withdrawal of the rejections is warranted.

Further, even if *arguendo* the Examiner has made a *prima facie* case, the instant invention shows unexpected results that could not be surmised by the teachings of the cited references. The instant invention does not have the smell and safety problems that are present in the other invention.

In conclusion, the cited references cannot render obvious the instant invention. First, the cited references fail to disclose the elements of the instantly claimed rejection. Second, motivation is lacking to combine the cited references. Third, even if the references are combined the instant invention has unexpectedly superior results. Withdrawal of the rejection is warranted and respectfully requested.

With the above remarks and amendments, it is believed that the claims, as they now stand, define patentable subject matter such

that a passage of the instant invention to allowance is warranted.

A Notice to that effect is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John W. Bailey (Reg. No. 32,881) at the telephone number of the undersigned below.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

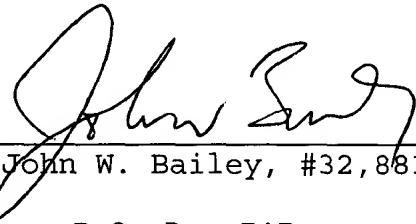
Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants respectfully petition for a one (1) month extension of time for filing a reply in connection with the present application, and the required fee of \$110.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By



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Attachment: Version with Markings to Show Changes Made

(Rev. 02/20/02)

BS
JWB/TBS/crt
0649-0772P

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims have been amended as follows:

Claim 1. (Amended) A molding composition comprising:

(A) an aggregate;

at least one of (B) a linear unsaturated polyester[,] and

(C) a linear unsaturated polyester polyamide; and

(D) a radical generator,

wherein each of [said] Component (B) and (C) has a content of an alkylene (having from 2 to 4 carbon atoms) oxide adduct of bisphenol A (average added number of mols: 1 to 10) of 3 to 50 mol% based on an amount of constituent monomers of each of said Components (B) (C) wherein the composition is substantially free of ethylenically unsaturated group-containing monomers.

Claim 8 has been added.